AN EDUCATIONAL SERVICE OF THE
COLORADO RIVER WATER CONSERVATION DISTRICT

How much water is out there?

Water is one of the most abundant resources on planet earth. With 70% of the earth's surface is covered with water, why do we have such a shortage of water for human uses? The fact is, only a tiny percentage of this planet's water supply is useable, fresh water that we can access.

Here's the breakdown:

- 97% of the earth's water is salt water in the oceans and seas.
- 3% of the earth's water is freshwater.
- 77% of the freshwater on the planet is locked-up on polar icecaps: 85% of the frozen freshwater is in the Antarctic icecap, 15% of the frozen freshwater is in the northern polar icecap and glaciers.
- 22% of the freshwater on the planet is underground. Half of the groundwater on the planet is accessible within half a mile of the earth's surface, the other half is deeper and is considered inaccessible.
- Of the remaining 1% of the earth's freshwater not underground or frozen in icecaps, 89.8% is found in freshwater lakes, 9.3% floats above the ground in the atmosphere as clouds and humidity, and only the remaining 9/10ths of 1% of the earth's fresh water flows in the world's rivers and streams.
- Of the mere sliver of fresh water present on the earth's surface in rivers, lakes and streams, 20% of that is found in just one source: Lake Baikal in southeastern Siberia.
- Basically, only 0.3% of the world's water is useable, accessible fresh water -- a very tiny portion indeed.

The tiny fraction that represents the earth's available fresh water supply can be pared down even further by looking at how water is distributed throughout North America. As continents go, North America is a relatively wet one, though water is not apportioned evenly among its nations and states. Canada has slightly over half of North America's fresh water, the U.S. roughly 46% and Mexico has only a few percent of North America's surface water resources.

In the United States, one state - Alaska – has over 40% of the all the nation's surface water flowing in its rivers. Most of the remaining surface water found in the 48 contiguous states, about 75% of it, occurs east of the Mississippi River. That leaves 14

states in the dry, western United States with only 14% of all the surface water available in the U.S. – a small sum indeed.

Colorado is one of these 14 dry western states. Even in Colorado, there is great disparity over where water occurs. Roughly 80% of the surface water in the state is found in the western half of the state, while only 20% of Colorado's surface water is East of the Continental Divide, where incidentally four out of every five Coloradoans live.

Roughly 2/3rds of Colorado's water supply comes from surface sources such as streams, lakes and reservoirs, while the remaining third is pumped from underground water resources.

Coloradoans use approximately 200 gallons of water per person per day to go about their daily lives. Fifty to seventy percent of that amount is used outside the home for watering lawns and plants during the warmer months. Inside the home, average water use is around 74 gallons per person per day. Is that a lot of water? It's estimated that in 1900 the average household used just 7-8 gallons of water per day, which is a load of about 60 lbs. for people who were by and large hauling their water from wells, streams or communal spigots. Today, the average shower alone consumes about 12 gallons of water. Water has become cheap enough and convenient enough that our use of it has escalated enormously.

To boil down this statistical soup, Colorado has very little of what is already a very scarce resource – fresh water that we can use.